# Bureau of Chemical and Environmental Services
# Environmental (Water) Microbiology

## *Environmental Microbiology*

### How safe is your drinking water?

Most people take their drinking water for granted. However, a lot of effort is required to provide clean and pure water. The UPHL environmental microbiology lab works together with water utilities and state regulators to assure the highest quality water for you. We do this by testing for the presence of bacteria, viruses, and parasites in your drinking water on a frequent basis.

This section:

- performs testing for bacteria on drinking water. Typically, our lab becomes involved when a utility has already noticed that certain types of bacteria are present in the water. Then, our special team helps them investigate by identifying the types and numbers of bacteria that are present.
- monitors streams and reservoirs to ensure that they do not become polluted. Streams flow into reservoirs and reservoirs become our drinking water. If someone is suspected of polluting a stream, it can create a problem for everyone who uses water! Therefore, we can help the Department of Environmental Quality to ensure a constant supply of good water. In addition, clean water in the reservoirs assures that the fishing will be great and the fish will be tasty!
- checks swimming pools and recreational lakes to make sure that people do not become ill after swimming. Summers in Utah are hot and people like to swim, and no one wants to get sick during their vacations.
- helps local health departments, utilities, the state epidemiologist, and the Department of Environmental Quality in the rare cases where an outbreak is suspected to be due to water. In this case, scientists at the lab review the scientific literature to see if additional tests can be done to assist in detecting the causes of the outbreak. Special studies can be performed very rapidly.
- Our lab is one of only 26 laboratories in the United States certified by EPA to be able to perform Cryptosporidia testing (EPA method 1623).
- Other methods for which EPA has certified the Environmental Microbiology Section are: SM

9222 D Fecal Coliform by Membrane Filter, SM9215 B Heterotrophic Plate Count, SM 9260 J Legionella, SM9221 D Coliform Presence Absence Test, SM 9223 B Total Coliform by Colilert, and SM 9222 B Total Coliform by Membrane Filter.

We do all of this because our mission is to protect the health of the citizens of Utah!